



HEAD MOUNTED THERMAL IMAGER *HMTI*



Applications: The development of the Head Mounted Thermal Imager, HMTI, was initiated with the intent to satisfy mission requirements in both SOCOM and counter drug law enforcement. The HMTI is targeted to fulfill operation requirements that the current hardware can not satisfy. The HMTI allows the individual to navigate and detect targets in complete darkness while in a passive mode. These situations occur when insufficient light exists to allow the current image intensified hardware to operate effectively in the passive mode, i.e. the interior of structures. The HMTI allows the individual to operate in most obscurants and to utilize obscurants for ingress or egress. The initial evaluations of the HMTI indicate a possible application to combat care as well. The HMTI also assists in the detection of targets via their thermal signature, which is often uncamouflaged.

Technology: In addition to the operational capabilities mentioned in the Applications paragraph, the following capabilities exist in the HMTI. The HMTI can provide imagery for recording or transmission. The HMTI can display imagery from external sources, i.e. thermal weapon sights. The system was designed to aid in the individual's navigation and thus provides a 40° FOV, unity power image. The system was developed to approximate the AN/PVS-5 NVG's size, and weight. The HMTI currently adds 1.9 lbs. to the head with the sensor weight at 1.25 lbs and the remainder consisting of the display and display mounting hardware. The system utilizes a battery pack that houses a BA5847/U battery.

